

## A WORD FROM THE ACTING DIRECTOR OF THE OFFICE OF SCIENCE

**A**s I looked over this publication prior to its printing I was inspired by the efforts of the visiting interns, their mentors, and their host laboratories as they worked together to help realize the full potential of the promising scientific talent residing in this country and as clearly shown by this publication.

The works contained herein also reflect the unique, valuable resources that are sustained by the Office of Science in the Department of Energy and the contribution the Office makes to the Nation. The interns, I hope, have come to an appreciation that the Office of Science is the Nation's primary supporter of research in the physical sciences, and advances in the physical sciences have helped advance other fields of science. For example, our synchrotron light sources, an unexpected spin-off from the development of subatomic particle accelerators, are used today more by researchers in the life sciences than in any other discipline. In our efforts to understand the fundamental forces of nature, researchers supported by us discovered that the universe is expanding at an accelerating rate, a discovery that was made possible in part by the computing work done at our supercomputer center known as the National Energy Research Scientific Computing Center (NERSC). We are also helping to capitalize on the recent decoding of the genome through a new program, Genomes to Life, that will bring researchers from many disciplines together to understand how the purpose of a gene is ultimately expressed as a biological function.

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I was delighted to see, through this publication, that the interns have been able to take full advantage of the resources that are represented by our National Laboratories. Their papers are a testament that the National Laboratories are unsurpassed in the scientific, engineering and technical arenas. These laboratories have created some of the greatest scientific instruments that reach from the smallest levels of atomic structure to the farthest distances in the known universe. But more importantly, the interns have learned that our National Laboratories value and nurture the scientists, engineers and technicians that make our science possible, indeed the most precious resource we have as a nation.

To the interns, I hope that through your experience at the National Laboratories, you have come to appreciate what a career in science could hold for bright, energetic and committed young scientists such as yourselves. I trust that, independent of what career path you ultimately follow, you will cherish the experience that you had as an intern, you will continue to appreciate the excitement that science at the forefront gives and the wonder that it bestows, and you will seize the opportunity to work in a National Laboratory should such good fortune one day coincide with your career plans.

**James Decker Ph.D.**



Acting Director of the Office of Science